

***In the claims:***

1-16. (Cancelled)

17. (Currently Amended) A method of extracting multiple tissue samples from a subject, comprising

inserting into the subject a volume of a tissue an instrument comprising a sharp distal end and a plurality of controllable tissue sampling devices each of said devices being located in a different position in an array along a longitudinal axis of a housing, each of said sampling devices comprising an isolated chamber, the volume of said isolated chamber being less than 1.2 millimeters;

contacting a sampling device with deployment signal, said signal being selected from the group consisting of an electrical, optical, pneumatic, hydraulic, RF- transmitted, inductive, magnetic, thermal or sonic signal, said signal causing an opening of said chamber;

removing [a] tissue samples from an anatomical locations at varying depths within said tissue adjacent to said chamber; and  
sealing said chamber.

18. (Original) The method of claim 17, wherein said sampling devices are deployed simultaneously.

19. (Original) The method of claim 17, wherein each of said sampling devices is deployed temporally.

20. (Currently Amended) A method of extracting multiple tissue samples from a subject, the method comprising:

inserting the instrument of claim 1 into the subject into a volume of a tissue an instrument comprising a sharp distal end and a plurality of controllable tissue sampling devices each of said devices being located in a different position in an array along a longitudinal axis of a housing, each of said sampling devices comprising an isolated chamber, the volume of said isolated chamber being less than 1.2 millileters;

heating the plurality of sampling devices, heating causing actuation of a mechanical portion of the plurality of sampling devices, such that a mechanical portion of the sampling devices collects [a] samples from varying depths within said tissue and retains the samples; depositing the samples into a local chamber; and removing the instrument from the subject.

21. (Original) The method of claim 20, wherein heating comprises passing electrical current through a portion of the extracting device.
22. (Original) The method of claim 20, wherein collecting and retaining the sample comprises applying a differential pressure to the local chamber and sucking the sample into the local chamber.
23. (Original) The method of claim 20, further comprising ejecting the samples by pressurizing the chamber.
24. (Withdrawn) The method of claim 20, wherein collecting and retaining the sample comprises scooping the sample from the subject by pivoting a scoop from a rest position after heating the scoop.
25. (Withdrawn) The method of claim 20, wherein collecting and retaining the sample comprises expanding a volume of a fluid in a chamber and causing a set of jaws to deploy from the chamber.
26. (Original) The method of claim 20, further comprising imaging a location of the sample fiberoptically.
27. (Previously Presented) The method of claim 1, wherein the volume of said isolated chamber is selected from the group consisting of 0.005, 0.01, 0.05, 0.1, 0.5, and 0.75 cubic millimeters.

28. (Previously Presented) The method of claim 17, wherein the volume of said isolated chamber is selected from the group consisting of 0.005, 0.01, 0.05, 0.1, 0.5, and 0.75 cubic millimeters.
29. (Currently Amended) The method of claim [1] 20, wherein said instrument comprises greater than ~~about~~ 50 of said isolated chamber.
30. (Currently Amended) The method of claim 17, wherein said instrument comprises greater than ~~about~~ 50 of said isolated chamber.
31. (New) The method of claim 17, wherein said tissue sampling devices remove samples at varying depths in said tissue to map variation in a given line or direction.
32. (New) The method of claim 20, wherein said tissue sampling devices remove samples at varying depths in said tissue to map variation in a given line or direction.
33. (New) The method of claim 17 wherein said tissue comprises a diseased area.
34. (New) The method of claim 20 wherein said tissue comprises a diseased area.
35. (New) The method of claim 17 wherein said tissue comprises a tumor.
36. (New) The method of claim 20 wherein said tissue comprises a tumor.
37. (New). The method of claim 17, wherein multiple linear samples are taken to evaluate the extent of change of tissue characteristics.
38. (New) The method of claim 20, wherein multiple linear samples are taken to evaluate the extent of change of tissue characteristics.
39. (New) The method of claim 35, wherein multiple linear samples are taken to evaluate the extent of tumor growth.

40. (New) The method of claim 36, wherein multiple linear samples are taken to evaluate the extent of tumor growth.